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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/723,501	11/28/2000	Dave McDysan	RIC00043	7593

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MCI, INC
TECHNOLOGY LAW DEPARTMENT
1133 19TH STREET NW, 10TH FLOOR
WASHINGTON, DC 20036

EXAMINER

GOLD, AVI M

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/723,501

Applicant(s)

MCDYSAN ET AL.

Examiner

Avi Gold

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/21/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to the appeal brief filed on March 22, 2005. Claims 2-18 and 20-38 are pending.

Response to Amendment

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2-6, 9, 20-24, 27, 37, and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Miles et al., U.S. Patent No. 6,665,495.

Miles teaches the invention as claimed including a non-blocking scalable optical router having an architecture that optimizes bandwidth management to allow for non-blocking switching and routing of optical data packets (see abstract).

Regarding claim 37, Miles teaches an external processor for a network access system having a programmable access device, said external processor comprising:

a message processor configured to parse a message for determining a type of communication service (col. 26, line 64 – col. 27, line 14, Miles discloses a packet classification module);

a service controller configured to receive the message if the type of communication service corresponds to the service controller, wherein the service controller determines a policy based on the message and generates a control signal according to the policy (col. 27, lines 38-64, col. 28, lines 24-32, Miles discloses policy based routing, a QoS controller, and a classification index based on QoS/policy); and

a programmable access device (PAD) controller configured to receive the control signal for configuring a PAD to enforce the policy with respect to a network connection between a first network and a second network (col. 28, lines 33-49, Miles discloses a classification index sent to an optical switch core which then routes the packets to the appropriate destination).

Regarding claim 2, Miles teaches the external processor of claim 37, wherein the external processor includes a plurality of service controllers including said service controller, wherein each of said plurality of service controllers implements a respective one of a plurality of services (col. 27, lines 38-64, col. 28, lines 24-49; Miles discloses the use of different controllers).

Regarding claim 3, Miles teaches the external processor of claim 2, wherein the plurality of service controllers includes primary and secondary service controllers for a particular service among said plurality of services, and wherein the secondary service controller provides said particular service to said programmable access device if said

primary service controller fails (col. 31, lines 1-19; Miles discloses the use of deflection routing).

Regarding claim 4, Miles teaches the external processor of claim 2, wherein said plurality of service controllers includes a second service controller in communication with said first service controller such that a network message can be serviced by both of said first service controller and said second service controller (col. 25, lines 7-22, Miles discloses unit controllers used for message exchange).

Regarding claim 5, Miles teaches the external processor of claim 2, wherein the external processor is coupled to a plurality of programmable access device, and wherein at least one of the plurality of service controllers performs selectively service processing for a portion of said plurality of programmable access devices (col. 9, lines 1-12, col. 10, lines 27-51; Miles discloses multiple switch cores with different functions).

Regarding claim 6, Miles teaches the external processor of claim 37, wherein the service controller includes means for injecting a packet into a traffic flow handled by the programmable access device (col. 28, lines 33-49; Miles discloses the super packets sent by the QoS controller to the optical switch core which are then injected in to traffic flow).

Regarding claim 9, Miles teaches the external processor of claim 37, and further comprising a reporting processor that provides an interface through which a reporting event received from the programmable access device is communicated to the service controller (col. 28, line 33 – col. 29, line 17; Miles discloses event information transferred between the optical switch core and the QoS controllers module).

Claims 20-24, 27, and 38 do not teach or define any new limitations above claims 2-6, 9, and 37 and therefore are rejected for similar reasons.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7, 8, 10, 11, 25, 26, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miles further in view of Gai et al., U.S. Patent No. 6,167,445.

Miles teaches the invention substantially as claimed including a non-blocking scalable optical router having an architecture that optimizes bandwidth management to allow for non-blocking switching and routing of optical data packets (see abstract).

As to claims 7, 8, 25, and 26, Miles teaches the method of claims 37 and 38.

Miles fails to teach the limitation further including a service policy interface through which the service controller requests policy decisions from a policy server and a policy cache that selectively caches policies obtained from the policy server.

However, Gai teaches a method and apparatus for applying high-level, quality of service policies at dissimilar computer network devices (see abstract). Gai teaches the use of policy servers (col. 5, lines 63-67; col. 6, lines 1-26) and a policy translator with storage (col. 9, lines 59-67; col. 10, lines 1-34).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Miles in view of Gai to use a service policy interface through which the service controller requests policy decisions from a policy server and a policy cache that selectively caches policies obtained from the policy server. One would be motivated to do so because policy servers allow a set of rules that can be applied to the network and the policy cache allows for those rules to be more quickly accessible.

As to claims 10, 11, 28, and 29, Miles teaches the method of claims 37 and 38.

Miles fails to teach the limitation further including a signaling controller that transmits signals, that specify a quality of service, to configure network hardware to provide network connections.

However, Gai teaches a method and apparatus for applying high-level, quality of service policies at dissimilar computer network devices (see abstract). Gai teaches the use of signals with a quality of service (col. 6, lines 27-67; col. 7, lines 1-29).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Miles in view of Gai to use a signaling controller that transmits signals, that specify a quality of service, to configure network hardware to provide network connections. One would be motivated to do so because signals with a specific quality of service help make efficient traffic management decisions.

5. Claims 12, 13, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miles further in view of Bullock et al., U.S. Patent No. 6,631,414.

Miles teaches the invention substantially as claimed including a non-blocking scalable optical router having an architecture that optimizes bandwidth management to allow for non-blocking switching and routing of optical data packets (see abstract).

As to claims 12, 13, 30, and 31, Miles teaches the method of claims 37 and 38.

Miles fails to teach the limitation further including the service controller comprising a session management means for causing the programmable access device controller to signal the programmable access device to end a Transport Control Protocol (TCP) session receiving enhanced service and wherein the session management means comprises means for causing the programmable access device controller to signal the programmable access device to delete the TCP session state in response to a session activity level.

However, Bullock teaches incoming and outgoing communications between peer nodes requiring only a single line per dedicated peer (see abstract). Bullock teaches

the use of a session manager job event handler that ends and deletes a TCP session in response to a session activity level (col. 8, lines 46-67; col. 9, lines 1-13).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Miles in view of Bullock to use a service controller comprising a session management means for causing the programmable access device controller to signal the programmable access device to end a Transport Control Protocol (TCP) session receiving enhanced service and wherein the session management means comprises means for causing the programmable access device controller to signal the programmable access device to delete the TCP session state in response to a session activity level. One would be motivated to do so because if there is no activity on a TCP session then it should be ended and deleted so that no more packets will be sent to it.

6. Claims 14-18 and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miles further in view of Bowman-Amuah, U.S. Patent No. 6,442,547.

Miles teaches the invention substantially as claimed including a non-blocking scalable optical router having an architecture that optimizes bandwidth management to allow for non-blocking switching and routing of optical data packets (see abstract).

As to claims 14 and 32, Miles teaches the method of claims 37 and 38.

Miles fails to teach the limitation further including the service controller comprising a conference call service controller.

However, Bowman-Amuah teaches information service management in hybrid communication network system, including data and communications management (see abstract). Bowman-Amuah teaches the use of an automated callback system for call setup and control of a conference call (col. 39, lines 14-67; col. 40, lines 1-5).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Miles in view of Bowman-Amuah to use a service controller comprising a conference call service controller. One would be motivated to do so because it would allow the invention to handle conference calls.

As to claims 15 and 33, Miles teaches the method of claims 37 and 38.

Miles fails to teach the limitation further including the service controller comprising an e-commerce service controller.

However, Bowman-Amuah teaches information service management in hybrid communication network system, including data and communications management (see abstract). Bowman-Amuah teaches the use of "Next Generation Network" architecture enabling E-Commerce services (col. 14, lines 59-67; col. 15, lines 1-27).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Miles in view of Bowman-Amuah to use a service controller comprising an e-commerce service controller. One would be motivated to do so because it would allow the invention to participate in e-commerce.

As to claim 16 and 34, Miles teaches the method of claims 37 and 38.

Miles fails to teach the limitation further including the service controller comprising an Internet protocol telephony service controller.

However, Bowman-Amuah teaches information service management in hybrid communication network system, including data and communications management (see abstract). Bowman-Amuah teaches the use of a "Next Generation Network" cable infrastructure that can provide IP based telephony services (col. 19, lines 43-60).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Miles in view of Bowman-Amuah to use a service controller comprising an Internet protocol telephony service controller. One would be motivated to do so because it would allow the invention to handle IP telephony.

As to claims 17 and 35, Miles teaches the method of claims 37 and 38.

Miles fails to teach the limitation further including the service controller comprising a reserved bandwidth service controller.

However, Bowman-Amuah teaches information service management in hybrid communication network system, including data and communications management (see abstract). Bowman-Amuah teaches the use of a predetermined amount of bandwidth (col. 4, lines 7-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Miles in view of Bowman-Amuah to use a service controller comprises a reserved bandwidth service controller. One would be motivated to do so because it would help avoid bandwidth congestion.

As to claims 18 and 36, Miles teaches the method of claims 37 and 38.

Miles fails to teach the limitation further including the service controller comprising a multicast service controller.

However, Bowman-Amuah teaches information service management in hybrid communication network system, including data and communications management (see abstract). Bowman-Amuah teaches the use a of Real-Time Transport Protocol for transmission of real-time data over multicast networks (col. 40, lines 34-67; col. 41, lines 1-58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Miles in view of Bowman-Amuah to use a service controller comprising a multicast service controller. One would be motivated to do so because it would allow the invention to multicast.

Response to Arguments

7. In view of the appeal brief filed on March 22, 2005, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth above.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,578,076 to Putzolu.

U.S. Pat. No. 6,219,706 to Fan et al.

U.S. Pat. No. 6,584,508 to Epstein et al.

U.S. Pat. No. 6,161,145 to Bainbridge et al.

U.S. Pat. No. 6,366,577 to Donovan.

U.S. Pat. No. 6,141,686 to Jackowski et al.

U.S. Pat. No. 6,286,052 to McCloghrie et al.

U.S. Pat. No. 5,842,040 to Hughes et al.

U.S. Pat. No. 6,286,035 to Gillis et al.

U.S. Pat. No. 6,311,215 to Bakshi et al.

U.S. Pat. No. 6,304,893 to Gish.

U.S. Pat. No. 6,788,647 to Mohaban et al.

U.S. Pat. No. 5,996,021 to Civanlar et al.

U.S. Pat. No. 6,771,673 to Baum et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 571-272-4002.

The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

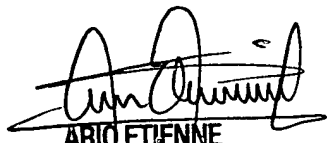
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Avi Gold

Patent Examiner

Art Unit 2157

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